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**1<sup>st</sup> Hepatitis C Virus World Community Advisory Board Report**

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hepCoalition supports the development of a global advocacy movement on access to hepatitis C diagnostics, treatment and support for people living with HCV in low- and middle-income countries, particularly people who inject drugs and people living with HIV.

hepCoalition is coordinated by Médecins du Monde and Treatment Action Group.

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*If the prices [of new HCV treatments] were to be unaffordable once more in history, it would be one more scandal around inequity of access to health care.*

—Michel Kazatchkine, United Nations Secretary–General’s Special Envoy on HIV/AIDS in Eastern Europe and Central Asia

*There are many people who cannot wait [for the price to drop]... they simply have to die.*

—Giten Kwairakpham, Treat Asia, Thailand

This report was written by Odilon Couzin and Karyn Kaplan, and edited by Andrea Benzacar, Lei Chou, and Tracy Swan.

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## ABOUT TAG’S HEPATITIS/HIV PROJECT

TAG’s Hepatitis/HIV Project draws from the core values and history of HIV activism, while incorporating hepatitis C–specific information into strategies targeting different constituencies, regions, and countries. The Hepatitis/HIV Project focuses on optimizing quality of, and broadening access to, HCV care and treatment for communities and individuals by continuing its domestic and international work with other activists, regulatory agencies, pharmaceutical companies, clinicians, and the patient community.

# TAG

**Treatment Action Group**

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# PREFACE

## About the Hepatitis C Virus World Community Advisory Board

Since the early years of the AIDS epidemic, people living with HIV/AIDS and their allies have organized their communities and met with drug companies, researchers, and government regulators to influence clinical trials design, policy, drug pricing, and access to treatment. The HIV World Community Advisory Board—formed by the International Treatment Preparedness Coalition—has held national, regional, and global meetings with originator and generic pharmaceutical companies since 2004. It played an instrumental role in the availability of affordable generic drugs, enabling the global scale-up of HIV treatment in developing countries.

The hepatitis C virus (HCV) World Community Advisory Board (CAB) grew from an international AIDS activist movement. The objectives of the meeting were three-fold:

1. To provide a forum for leading activists to learn about developments in HCV treatment and access barriers;
2. To find common advocacy strategies; and
3. To meet with pharmaceutical companies about their plans for low- and middle-income countries (LMICs).

The HCV World CAB included a broad range of activists, including people with HCV, people who inject drugs, people living with HIV/AIDS, representatives from non-governmental organizations and regional and global advocacy networks, and clinicians and researchers.

The 1<sup>st</sup> HCV World CAB met in Bangkok, Thailand, February 22–25, 2014. During the meeting, 38 activists from 22 countries held the first global LMIC-focused dialogue with pharmaceutical companies that produce HCV treatment. The meeting was co-organized by Treatment Action Group and the Asia Pacific Network of People Living with HIV/AIDS. The HCV World CAB was supported by AIDS Fonds, the Global Network of People Living with HIV, Médecins du Monde, Open Society Foundations, and the World Health Organization.

## Participant Selection Process

Treatment Action Group established an international selection committee. The committee disseminated an application form through the international hepatitis C advocacy listserv and other networks. Applicants from LMICs were selected if they:

- worked or volunteered at a grassroots, non-governmental organization serving people living with or at high risk for HCV;
- were engaged in HCV or HIV/HCV activism for at least one year;
- demonstrated tangible leadership and achievement on HCV or HIV/HCV issues; and
- had a working understanding of hepatitis C virus pathogenesis, prevention, diagnostics, treatment, and access barriers.

Special consideration was given to people with hepatitis C or HIV/HCV, especially people who inject drugs. The committee also sought regional balance and gender parity. Activists with specific technical expertise or experience were invited as presenters.

## HCV: Global Burden and Improvements in Treatment

Hepatitis C is a bloodborne virus. Although HCV is both preventable and curable, 185 million people have been infected,<sup>1</sup> and 3 to 4 million more are newly infected annually. Each year, almost 500,000 people die from HCV related liver failure or liver cancer.<sup>2</sup> HCV is most prevalent in LMICs; 72 percent of people with hepatitis C are living in middle-income countries (MICs), and 13 percent live in low-income countries (LICs).<sup>3</sup> Most have not even been diagnosed, and have no access to HCV treatment.

Hepatitis C virus is highly prevalent among people who inject drugs (PWID). Globally, at least 10 million PWID have been infected with hepatitis C.<sup>4</sup> Yet less than 4 percent of all PWID have access to HCV treatment, or to evidence-based harm reduction services such as needle and syringe programs or opioid substitution therapy.<sup>5</sup>

The increasing morbidity and mortality from chronic HCV has made it a priority for activists. Recent therapeutic advances have simplified HCV treatment and increased cure rates to over 90 percent, creating an opportunity for global eradication. The first all-oral, direct-acting antiviral (DAA) regimen has already been approved in Europe and the United States, and there are more DAA regimens in late-stage clinical trials. These regimens are highly effective, safe, tolerable, and do not require intensive monitoring.

The main barrier in LMICs to HCV treatment is the cost. In high-income countries (HICs), pricing for a single DAA ranges from US \$55,000 to US \$84,000. DAAs must be used in combination, so the cost of a complete regimen is even higher. Some analysts say the global market for HCV DAAs will grow to US \$18.6 billion by 2019.<sup>6</sup> Others estimate the U.S. market alone will be US \$21 billion by 2018.<sup>7</sup> Actual sales figures released in April 2014 indicate that sales for 2014 will likely surpass US \$10 billion,<sup>8</sup> far more than the amount analysts expected.

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## MEETING PART ONE: ACTIVIST WORKSHOP

Participants spent the initial two days conducting peer-led trainings on:

- Clinical developments in HCV treatment and diagnostics;
- Intellectual property (IP) barriers to access to essential medicines;
- Structural barriers to access in LMICs; and
- Issues facing key affected populations, in particular PWID and men who have sex with men (MSM).

### **Participant Consensus on Access Issues and Strategies**

Participants came from a wide range of countries and experiences, but shared a common goal. They gathered to advocate for universal access to the highest quality diagnostics, care, and treatment for HCV—regardless of income, geographic location, drug use, or HIV status.

They agreed that countries have the right to pursue the **full range of strategies** for securing access to affordable, quality HCV DAAs, and peginterferon (PEG-IFN).

## Drug Pricing, Licensing, Registration, and Patents

Pauline Londeix, Act Up-Basel

Generics have transformed the access landscape for people living with HIV/AIDS in LMICs; we also need to ensure that there are generic HCV medicines.

### Pricing

Pharmaceutical companies sell their drugs at different prices. Higher-income countries pay higher prices than lower-income countries.

**Standard pricing:** The initial price set in a high-income country, the primary market where a company can make most of its profit.

**Tiered pricing** (also called differential pricing or marketing segmentation): Prices for low- and middle-income countries are tiered, based on gross national income (GNI) and other factors (although the formula and prices are not transparent). Tiered pricing is not determined by what is affordable for governments.

Pharmaceutical companies consider middle-income countries (MICs) as emerging markets. Yet MICs have the greatest income inequality. According to the World Bank, nearly 75 percent of the world's poorest people (earning less than US\$1.25/day) live in MICs. Tiered prices in MICs are usually too high, leaving governments unable to address large epidemics (such as HCV). When MIC governments cannot provide medicines, people must pay for them themselves.

### Licensing

A license to produce a drug can be granted by a drug company, or by a government.

**Voluntary License (VL):** VLs are commercial rather than public health-based arrangements that allow pharmaceutical patent holders to control the market.

A voluntary license is granted by a pharmaceutical company that holds the patent on a certain medicine. The license allows another drug company to manufacture a generic version, in return for a fee or royalty (or at no cost), and with conditions set by the originator company. These include limiting the countries where they grant VLs, and imposing various restrictions—such as the number of people who can be treated, or where ingredients for drug production must be purchased.

If companies limit their VLs for DAAs to the same countries included in their VLs for HIV drugs, only 48 percent of people with HCV—at most—will be included in these agreements. Only 3 of the 15 highest-burden countries were included in Gilead's VL. India, home to most generic drug producers, was only included in Gilead's VLs because the patent for sofosbuvir (an HCV DAA) is being challenged there. Indian generic companies who signed VLs with Gilead cannot produce sofosbuvir, even if its patent is not granted, or revoked.

**Compulsory License (CL):** Governments can issue a compulsory license to allow production or importation of a generic version of a patented drug without the consent of the patent holder. A CL can be issued without prior request of a VL in certain cases, such as for public, non-commercial use in a national health care program.<sup>1</sup> This is a legal safeguard provided by the WTO's TRIPs agreement (see box on next page). In 2007, Brazil issued a compulsory license for efavirenz (a WHO recommended first-line antiretroviral [ARV]); the resulting five-year savings in Brazil exceeded US \$103 million.

However, compulsory licensing has come at great political cost to many of the LMICs that have implemented it. Countries may face political backlash, such as threats of trade sanctions or other punitive measures, usually by the U.S. government or pharmaceuticals. When Thailand moved to issue a CL for didanosine (ddl, an ARV) in 1999, the country was threatened with trade sanctions by the U.S. government. In 2007 when the Thai government issued a CL for Kaletra (an ARV), Abbott, the originator company, threatened to remove all of its products from the Thai market.



## TRIPS and the Right to Health

The 1994 World Trade Organization (WTO) Agreement on **Trade-Related Aspects of Intellectual Property Rights** (TRIPS) required all member countries to introduce or strengthen patent protections in their national laws.

Unlike most other consumer products regulated by the WTO, access to medicines is essential to realizing the human right to health. Patents on medications limit access and keep prices high, by blocking access to generic versions for 20 years in most countries.

In 2001, activists worked with United Nations agencies to push successfully for adaptation of the *Declaration on TRIPS and Public Health* at the Doha WTO Ministerial.<sup>2</sup> Known as the **Doha Declaration**, the document reaffirmed member countries' right to interpret TRIPS "in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all"—through TRIPS flexibilities such as compulsory licensing and parallel importing (from another country where a drug is cheaper, without the manufacturer's approval), to overcome patent barriers to affordable drugs.

### Registration

In order for a drug to be available in a country, the company must submit safety and efficacy data and register the drug with the regulatory authority in that country. It is an essential prerequisite for access to medications. While special authorization to use or import an unregistered drug may sometimes be requested, rules governing this process vary widely and are often very complex and only available to institutions, not individual doctors. Often, companies may delay or fail to file their drug in a country, inhibiting access.

### Patent Oppositions

Patent oppositions are challenges to patents, either before they are granted (pre-grant opposition) or after (post-grant opposition). A country's patent office determines whether a drug—or the procedures used to make it—are sufficiently novel to warrant granting or keeping a patent under domestic law. Patent laws are different in each country. Patent oppositions are not legally possible in all countries. A successful patent opposition creates the opportunity for generic drug competition, thereby bringing down drug prices.

- In Brazil, the patent application for tenofovir (an ARV) was rejected by the patent office in 2008 (and then again in 2009 and 2011), following oppositions filed by the Brazilian Network for the Integration of People, and Fiocruz, a think tank attached to the Brazilian Ministry of Health. A generic version of tenofovir was introduced in 2011, sold at slightly more than half Gilead's price to the government (US \$1,380).
- In India, the Indian Network for People Living with HIV/AIDS (INP+) and the Delhi Network of Positive People (DNP+), with the support of a group of lawyers, filed an opposition to Gilead's patent on tenofovir. In September 2009, the Indian Patent Office revoked Gilead's patent.
- On November 25, 2013, the Initiative for Medicines, Access & Knowledge (I-MAK) filed a patent opposition to sofosbuvir (an HCV DAA) with the Kolkata Patent Office in India. The opposition contends that sofosbuvir, despite its real therapeutic value for people with HCV, does not represent a "novelty" as defined by national patent laws in some countries, including the Indian patent act, and thus should not be granted a patent.

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## **Negotiating with Drug Companies**

### **Experiences from the Eastern Europe and Central Asia (EECA) CAB**

Sergey Golovin, International Treatment Preparedness Coalition–Russia (ITPC-ru)

In order to familiarize all meeting participants with the World CAB model, Sergey Golovin presented EECA region’s philosophy, methodology, and experiences with the CAB process. He introduced a few core principles:

- CAB meetings are opportunities for activists to learn about a range of medical, IP, and other information to help their work.
- Treatment activists are stronger when acting in unison; CAB meetings can facilitate both collaboration and information sharing.
- Countries often face similar problems, such as low coverage for PWID, high drug prices, etc.
- Regional activism can sometimes be more effective than individual country-based action.

Using the examples of five EECA regional CAB meetings held between 2011 and 2013, Golovin spelled out detailed rules and protocols for conducting CAB meetings, including the need for pre-meeting trainings on basic issues (such as current developments in drug research, price, etc.), the importance of maintaining a unified community voice during discussions with pharmaceutical companies, and the importance of formulating a final statement expressing community views on the discussions. The presentation concluded with four key “lessons learned” for participants:

1. Never overestimate the knowledge of pharmaceutical companies.
2. Never underestimate the power of joint efforts.
3. Public vs. confidential—transparency is powerful.
4. Try different approaches—sometimes you just never know what is going to work.

### **Experiences from the Asia Pacific CAB**

Shiba Phurailatpam, Network of PLHIV living in the Asia Pacific region (APN+)

From the Asia region, Shiba Phurailatpam presented the network’s recent experience negotiating with pharmaceutical companies, and ongoing advocacy targeting both companies and governments to lower prices and increase access to peginterferon (PEG-IFN).

Each country is different, but there is one thing they have in common: most will say “we can’t afford it”. To overcome this resistance, activists have been pushing for a US \$1,000 target price for a full course of PEG-IFN. Though Thailand had recently negotiated a price of US \$4,800 for 48 weeks, prices in Indonesia and other countries were much higher. APN+ took a three-pronged approach to its advocacy for access to affordable treatment:

- APN+ negotiated with Merck, Roche, and Indian generics companies for an NGO price between US \$1,000 and US \$2,000.
- At the same time, they approached governments to advocate for accelerated screening within affected communities (such as PWID in Northeastern India) and larger HCV treatment budgets.
- Finally, they initiated discussions with a number of Indian companies capable of producing a PEG-IFN biosimilar (see biosimilars on page 8).

These discussions are ongoing, and will hopefully lead to an affordable and sustainable source of treatment for people in India, and possibly other countries in the region.

Shortly before the World CAB meeting, Merck staff contacted APN+ to inform them that at least some of the countries in the region would be eligible for a discounted price of US \$41/vial (or US \$1,968 for a full course of treatment).

## Preparing for Drug Company Meetings

Simon Collins from HIV i-base and Tracy Swan from the Treatment Action Group described the value of CAB meetings for activists:

- We can get data.
- We can get our messages across.
- We can educate them—they are not connected to or in touch with community—sometimes this will change their behavior.
- We can put them on the spot, to clarify their position.
- We can create pathways for follow-up on specific issues for specific countries.

They stressed the importance of presenting a united front during the meeting, rather than making country-specific requests, and suggested a strategy: framing direct questions around 5 key LMICs (selected by the group) to get specific information. These included:

- Are you planning to use tiered pricing for DAAs? Where and how?
- Which ministers/departments of health have you met with?
- Who else are you planning to meet with?
- Will you release country-specific DAA pricing?
- Are you planning to locally manufacture in LMICs?
- Which companies do you plan to work with, and where?
- Can you tell us the price/price range set for each drug?
- Are you working with the Medicines Patent Pool (MPP)?
- Are you using other mechanisms?
- Which countries would be covered by your voluntary licenses (VLs)?
- What happens if I'm not in one of those countries?
- Why aren't you including our 5 key countries?
- What are your marketing plans?
- What percentage of the US \$20 billion dollar market share do you expect by 2019?
- What is the global sales data on your approved DAAs?
- How much profit will be enough?
- Is there a ceiling where you would relax access in advance of patent expiry?

## Strategies to Increase Access for PEG-IFN Biosimilars and DAAs

Azzi Momenghalibaf, Open Society Foundations (OSF)

### PEG-IFN Biosimilars

Peginterferon (PEG-IFN) is a biologic rather than a chemical. Biologics must be produced in living cells. There are two branded versions of PEG-IFN, produced by Roche and Merck. Generic versions of biologics are known as biosimilars; there are also alternative formulations of approved biologics.

PEG-IFN is still important for treating HCV in some places. In LMICs, the price of PEG-IFN varies, but is often far too expensive for people to pay for themselves, or for many of their governments to provide. Biosimilar competition is needed to lower prices and increase treatment access.

Assessing the quality, safety, and efficacy of biosimilars—and proving they do the same job as the original—is a challenge. The alternative versions of PEG-IFN that we know of will never meet the current E.U. or U.S. biosimilar regulatory guidelines, which require almost the same data package (i.e., phase III comparative clinical trials) as what the originator companies submitted for approval.

Activists have been calling on the U.S. Food and Drug Administration (FDA), the European Medicines Agency (EMA), and the World Health Organization (WHO) to help create a clear and simple pathway to approval, assess quality of biosimilar and alternative formulations, so that there will be access to affordable versions of these products in LMICs.

Potential solutions being explored by activists in different countries include:

**The Risk-Benefit Analysis approach:** Pushing for regulatory approval by a non-E.U. country with a reliable regulatory body (i.e., Brazil) that might be open to a less stringent standard than E.U./U.S.

**Seeking WHO prequalification and guidance:** WHO could develop and provide guidance on the quality of biosimilars to purchasers (such as national governments), as they currently do with other pharmaceutical products. The WHO can facilitate prequalification of biosimilars and alternative versions of biologic drugs according to standards they set, including ensuring biologic manufacturers' compliance with Good Manufacturing Practices (GMP).

### Direct-Acting Antivirals (DAAs)

Tracy Swan, Treatment Action Group

There are many oral DAAs in development for HCV treatment. DAAs need to be used with other drugs. DAA combinations have been safe and highly effective in clinical trials—with few side effects.

There are four classes, or families, of HCV DAAs in development: protease inhibitors, NS5A inhibitors, non-nucleoside polymerase inhibitors, and nucleoside/tide polymerase inhibitors. Each targets a specific step in the HCV lifecycle.

DAAs simplify hepatitis C treatment; ideally, regimens will be safe, simple, and short-course ( $\leq 12$  weeks), and:

- effective against all HCV genotypes, and for people with cirrhosis;
- easily co-administered with other commonly used medicines (such as TB drugs, ARVs, and opioid substitution treatment); and
- require limited monitoring during and after treatment.

Knowing country-specific information (such as the most common genotypes, availability of diagnostics, and capacity of the health care system) is critical. Not all DAAs are the same: some require expensive testing before they can be used, or are only effective for certain HCV genotypes. Information about DAAs in HCV genotypes 4, 5, and 6 (which are common in LMICs) is inadequate; less than 30 people with genotype 5 or 6 have been included in HCV treatment trials to date; only a few small trials are being done in genotype 4.

#### DAAs vs. PEG-IFN/RBV treatment duration and cure rates, by genotype

Genotype	PEG-IFN/RBV		DAAs	
	Treatment duration	Cure rate	Treatment duration	Cure rate
1	48 weeks	Approx. 50%	8–12 weeks	>95%
2	24 weeks	78%	12 weeks	88–97%
3	24 weeks	63%	24 weeks	85–89%
4	48 weeks	50%–70%	12–24 weeks	79–93%

Access to HCV treatment will require:

- Fighting for PEG-IFN to save the lives of people who need to be treated now, and lay the groundwork for large-scale HCV treatment implementation. The availability of biosimilars, new DAAs, and patent expiry may lower prices.
- Picking simple DAA regimens with less monitoring requirements to facilitate treatment scale-up. But with no competition, prices will be high.
- Bargain hunting—some companies will be sensitive to competition, since they may only have a single DAA, or they may face a crowded market of competing DAAs.

#### Why sofosbuvir?

Gilead's DAA, sofosbuvir, an NS5B nucleotide polymerase inhibitor, is the backbone of many oral HCV regimens in clinical trials. It can be used—with other drugs—in all HCV genotypes. Sofosbuvir-based treatment is shorter (6 to 24 weeks), simpler (requires less monitoring), more effective, safer, and has fewer—and milder—side effects than PEG-IFN and RBV. Some sofosbuvir-based trials have resulted in cure rates of up to 100% in some groups. Impressive clinical results from other DAAs continue to be reported, but to date sofosbuvir appears to be the strongest candidate for a “backbone” drug.

## **Population-Specific Considerations**

### **People Who Inject Drugs (PWID)**

Jude Byrne, International Network of People who Use Drugs (INPUD)

HCV has had the heaviest impact on the community of PWID: an estimated 10 million PWID are living with HCV, an infection rate of 67%. Among PWID, the HCV epidemic is more than 30 years old.

Formerly known as “non-A, non-B hepatitis” (NANB), HCV was only recognized as a distinct strain in 1988. During the 1980s, Australian PWID were regularly screened for hepatitis, and told if they had HBV or NANB infection. No one seemed to care, certainly not doctors or treatment agencies, and so PWID assumed there were no significant health implications. While it may not have been well recognized, it swept through PWID communities.

HCV wasn’t appreciated or understood by researchers, gastroenterologists, or government health agencies; PWID felt that they had dodged a bullet if they were only infected with HCV and not also HIV. This was reinforced by doctors and policymakers’ general lack of awareness or attention to the implications of HCV infection. This ignorance was compounded by historical stigma, discrimination, and neglect of PWID.

The HCV epidemic among PWID represented a culture of inaction within the government and medical community over a 20-year period, bordering on criminal negligence.

Unlike with HIV, once the blood supply was properly screened, continuing HCV transmission was largely contained within the PWID community, so there was little perceived public health pressure to address the needs of PWID at the policy level.

### **Men Who Have Sex with Men (MSM)**

Noah Metheny, Policy Director, MSM–Global Forum

HCV is easily transmitted via blood-to-blood contact, but it is unclear how easily it is spread through sexual contact. Among MSM, research shows that those who are HIV-positive and have condomless anal sex are at greater risk for HCV, since immune deficiency or genital ulcer disease (e.g., herpes lesions) may be present. Additional factors are believed to be group sex, fisting, and use of non-injection drugs, including cocaine and methamphetamine.

Recently, there were reported outbreaks of sexually transmitted HCV among HIV-positive MSM in Europe, the U.S., and Australia, including:

1. In New York City, from 2005 to 2010, 74 HIV-positive MSM with no history of injecting drugs tested positive for HCV.
2. In Providence, Rhode Island, Miriam hospital started testing all HIV-positive patients for HCV, and found a 9% prevalence rate among 150 HIV-positive MSM in six months.
3. A Dutch study found HCV infection rates among HIV-positive MSM rose from 1-4% in 2000 to 21% in 2008.
4. Overall European HCV prevalence is 6.6% among HIV-positive MSM, with a prevalence of 7.2% in the U.K.

Screening and prevention guidelines specifically for viral hepatitis and MSM are not widely available, as few studies have been conducted on this issue. Even in the U.S., all MSM are screened and tested for chronic HBV on an annual basis at the very least, but only some are tested for HCV.

**A call to action:**

Urgent advocacy was needed to raise awareness of HCV among MSM, and to include MSM in the growing advocacy movement around HCV testing and treatment access.

- Screening and treatment for HBV and HCV, and HAV/HBV vaccination should be included in the minimum service package for MSM.
- Health providers working with MSM need to be provided training and education around viral hepatitis and comorbidity of HIV.
- MSM communities need to get involved in HCV advocacy.
- Research gaps should be addressed—there's not enough research or research funding aimed at HCV or HIV/HCV among MSM.

## Lessons from HIV

Participants at the HCV World CAB agreed that many of the lessons from the HIV/AIDS treatment advocacy movement were relevant to ensuring universal access to HCV treatment. Civil society mobilization and involvement in all aspects of policymaking and programming were critical to widespread access to affordable, quality-assured generic ARVs. Many of the experienced AIDS activists at the HCV World CAB were aware of tactics that pharmaceutical companies had used to limit access to lifesaving ARVs in LMICs:

- Delaying or failing to register a drug in every country (without registration, neither the originator nor the generic version can be sold);
- Filing multiple patents to block the market for generics, without having any intention of selling their drug in that country;
- Use of tiered pricing and restrictive voluntary licensing, both of which delayed or prevented access to affordable generics ARVs for millions of people; and
- Opposing compulsory licenses.

Pharmaceutical companies are poised to use these same tactics to block affordable generic HCV treatment, as they have done with ARVs, to the detriment of hundreds of millions of people.

### Generic ARVs

The availability of generic HIV medications has been—and continues to be—critical to bringing down prices. Generic fixed-dose combinations have made lifesaving treatment available to people living with HIV/AIDS in resource-limited settings. Generics reduced the price of a first-line ARV combination by 99% within a decade (from US \$10,000 to under US \$100 per person per year).<sup>1</sup>

Multinational companies have used many strategies to undermine generic drug competition. Where they cannot prevent generics production through patents or other means, they often lower their price to match or nearly match a generic drug price. Although this does lower prices in the short term, it is a fundamentally anti-competitive practice that deprives generics companies of the profits that they need to continue operating, and is a disincentive to producing generic drugs in the future.

Companies have used other, more aggressive measures to block access to generics. For example, Novartis challenged the rejection of a patent for its cancer drug Gleevec (imatinib) in India, by attacking the constitutional validity of the health protection provision (section 3d) in the Indian patent law. The Indian Supreme Court rejected the company's challenge in 2013.

***It's always useful to tell history the way it actually happened...It WAS generic competition... the history of HIV shows that is what drives down prices, and that is what increases availability. But it's not just prices, it's where you can get the drugs out to, it's distribution, it's everything...but for us the history of the HIV movement is precisely that: generics.***

—Kajal Bhardwaj, India

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1. Médecins Sans Frontières (MSF). Untangling the web of antiretroviral price reductions, 16th Edition. July 2013. Available from: [http://www.msfaccess.org/sites/default/files/AIDS\\_Report\\_UTW16\\_ENG\\_2013.pdf](http://www.msfaccess.org/sites/default/files/AIDS_Report_UTW16_ENG_2013.pdf). (Accessed 2014 June 9)



## Country Profiles

Before the HCV World CAB meeting, each participant prepared a one-page country backgrounder, including information on HCV prevalence, the availability and price of HCV diagnostics and treatment, and civil society advocacy plans and achievements. This information was used to develop a collective strategy for the company meetings.

Many participants came from middle-income countries (MIC). In some of these countries, such as Georgia, India, Indonesia, Thailand, and Ukraine, community-led advocacy has helped convince governments to commit to provide HCV treatment, and in others, HCV work is just beginning.

In all of the countries, the cost of diagnostics and treatment remains an obstacle. Even where PEG-IFN and ribavirin—still the standard of care in LMICs—are available and governments are committing to scale-up, PEG-IFN producers (Roche and Merck) have provided only modest price reductions. Egypt is the only country that has negotiated a price for new DAAs in both the public and private sectors.

## CHINA

**GNI per capita:** US \$5,720.

**Disease burden:** many estimates, no official number: 0.4% to over 4%, but 60%–90% among PWID.

**Access to treatment:** IFN+ribavirin (RBV\_ or PEG-IFN/RBV. Treatment access is extremely limited, largely due to price of PEG-IFN (US \$8,000–10,000) and socioeconomic position of PWID and poor rural residents.

**Access strategy:** In 2013, the Chinese government opened an office (inside the national CDC) dedicated to viral hepatitis, but there is no national plan or any treatment guidelines. Government insurance technically includes HCV treatment, but only for expensive inpatient treatment, making the cost too high for most patients.

**Barriers to treatment:** Price of treatment and lack of patient awareness.

**Facilitators:** NGOs have paid little attention to HCV, though there is a push from groups and networks of people who inject drugs and people living with HIV/AIDS to advocate for lower prices and better access to testing and treatment, and to increase screening and awareness among PLHIV and PWID.

## EGYPT

**GNI per capita:** US \$3,290.

**Disease burden:** Egypt has the highest known HCV infection rates in the world (estimated to be 10–13%), with infection rates as high as 50% among some age groups.

**Access to treatment:** Treatment with locally produced PEG-IFN (a biosimilar costing EGP 20,000/US \$2,850) is provided by the Egyptian government, either through government insurance or from the Ministry of Health.

**Access strategy:** The National HCV control strategy (2008–2012) includes four priority areas: surveillance and monitoring, prevention, patient management (includes improved access to treatment and reduction of medicine prices), and research. Recently 10 National Treatment Reference Centers were opened, and there are about 100 hospitals in Egypt equipped to treat advanced liver disease patients.

**Barriers to treatment:** Barriers include lack of awareness and financial constraints among poor rural residents.

**Facilitators:** A number of local NGOs have successfully advocated for improved access to HCV treatment with PEG-IFN, and are currently advocating for access to new DAAs. Civil society pressure helped to secure a price of approximately US \$900 for a 12-week course of sofosbuvir in Egypt, though only for government procurement.

## GEORGIA

**GNI per capita:** US \$3,290.

**Disease burden:** 200,000 people (6.7%).

**Access to treatment:** Georgia is introducing free PEG-IFN/RBV treatment for prison inmates. Access among the general population is limited.

**Access strategy:** By 2013, there was a commitment from the government, but limited funds (approx. US \$2 million) available for scaling up treatment, starting with free treatment for those in prison.

**Barriers to treatment:** High cost of diagnostics and PEG-IFN.

**Facilitators:** Since 2010, many NGOs have advocated for a coordinated national response that includes reduced diagnostic and treatment prices, as well as to raise awareness about HCV. Campaigns have also targeted pharmaceutical companies for high drug prices.

## INDONESIA

**GNI per capita:** US \$3,420.

**Disease burden:** 9.4 million (3.9%); 77% among PWID, 60–90% coinfection among PLHIV.

**Access to treatment:** Access is extremely limited, largely due to the high cost. Treatment includes PEG-IFN/RBV.

**Access strategy:** A new national health insurance scheme (effective January 2014) includes testing and treatment for viral hepatitis for those who are registered under the scheme. However, a new presidential decree forbids treatment for drug addiction, and limits the amount used for hepatitis treatment. Many fear HCV among PWID will also be excluded.

**Barriers to treatment:** High price of treatment (US \$10,560–14,400) and diagnostics; lack of awareness among PWID, medical staff, and other service providers.

**Facilitators:** The national PWID network and other NGOs have successfully advocated for the government to create a multisector HCV task force (including civil society), and participated in drafting national harm reduction guidelines that include HCV services. NGOs continue to advocate for HCV treatment price reductions and the removal of barriers for current and former PWID to access HCV treatment.

## KENYA

**GNI per capita:** US \$860 (2012).

**Disease burden:** 0.2% to 0.9% (40% among PWID).

**Access to treatment:** There is extremely limited access. HCV testing and treatment is neither accessible nor affordable. Testing can only be done in research set up, and treatment is only provided for the few rich persons who can afford to pay for it.

**Access strategy:** The government has a “viral control plan” which is not HCV-specific.

**Barriers to treatment:** There is a lack of awareness and information about HCV at all levels. Testing and treatment are far too expensive for the affected populations (largely PWID), and only a few facilities can provide these services, most at the national level.

## MAURITIUS

**GNI per capita:** US \$8,570 (2012).

**Disease burden:** est. 40,000 people (3.1% of total pop.), 97.3% HCV+ among PWID (2011 survey).

**Access to treatment:** PEG-IFN/RBV (48 weeks), which costs approximately US \$20,000 per patient. Telaprevir is available on a named-patient basis only and costs approximately US \$33,000 (3 months).

**Access strategy:** There is no national policy or related policies, and a lack of information and awareness. Those who test HCV positive are not referred for viral load or genotyping. Treatment is only offered if a person has been infected prior to 1997 (when blood donation screening for HCV began). There is no registry or monitoring for people who have been tested HCV-positive.

**Facilitators:** There is a newly formed network of 12 NGOs planning to advocate for improved HCV treatment. One existing NGO (composed of full-time doctors) has had some limited impact in the past.

## RUSSIA

**GNI per capita:** US \$12,700 (2012).

**Disease burden:** 5.8 million people (4.1%).

**Access to treatment:** Treatment is primarily PEG-IFN/RBV.

**Access strategy:** Russia has a national HIV, HCV, and HBV program. Treatment and testing should be available free of charge for people with HIV/HCV coinfection, and in some regions for a limited number of people with mono-infection. The total (federal) budget for HCV drugs in 2012 was around US \$45 million.

**Barriers to treatment:** High pricing; lack of knowledge about the disease and the treatment and services available; lack of funds for mono-infected patients; stigmatization of people using drugs.

**Facilitators:** Many different NGOs have advocated for increased HCV budgets. One group successfully sued for access to free HCV testing for mono-infected patients (as well as coinfecting ones). NGOs continue to pressure pharmaceutical companies to lower prices. Some HIV groups are also providing HCV information, counseling, and testing.

## THAILAND

**GNI per capita:** US \$5,210 (2012).

**Disease burden:** 1.5 million (2.2% of total population), but more than 90% among PWID.

**Access to treatment:** Access to PEG-IFN/RBV is limited; a new government treatment program and a demonstration site (run by Treat Asia) are expected to increase access in 2014.

**Access strategy:** National policy includes HCV treatment under the Universal Healthcare scheme. PEG-IFN is on the Essential Drugs List (EDL), though access is still limited to genotypes 2 and 3 (24-week). Side-effect management and drugs are paid by patient. HCV screening is covered for PLHIV.

**Facilitators:** Thai AIDS Treatment Action Group (TTAG), PSI-Thailand, and network of local NGOs (Thai Drug Users' Network and Thai Network of PLWHA, et al.), have successfully advocated for government to cover HCV screening and treatment, supported PEG-IFN price negotiations with Merck, and are working to increase awareness of HCV.

**Barriers to treatment:** Main barriers are high cost (government pays US \$4,800) and low awareness of HCV. Few if any get confirmatory viral load, genotype, or other tests (these are paid by patients). There are few specialist doctors, and only in big cities. PWID are marginalized in the health care system and have very little access.

## UKRAINE

**GNI per capita:** US \$3,500 (2012).

**Disease burden:** 1.2 million people are estimated to be infected; 65% of PLHIV are also living with HCV.

**Access to treatment:** Approximately 5% of those who need treatment in 2013 have access to PEG-IFN/RBV, 15% in 2014 (according to national plan).

**Access strategy:** National government has approved a 2013–2016 HCV program, but current approved budget (US \$4.3 million in 2013) only allows 1,048 people treatment in 2013 and 3,300 in 2014.

**Barriers to treatment:** High prices (US \$5,600 for government US \$5,000 for AIDS Alliance, US \$14,880–17,040 retail). Also lack of a screening program, a weak hepatology program, and lack of trained staff.

**Facilitators:** Civil society mobilized (76 local NGOs) to advocate for the government to create the HCV program, approve state and local government budgets for HCV (US \$4.3 million and \$2 million respectively) and continues to push for improved access, increased budget allocations, and better services.

## VIETNAM

**GNI per capita:** US \$1,550 (2012). More than 43% of people live on less than US \$2 per day.

**Disease burden:** 4.5 million (5% of total population); up to 98.5% of PWID.

**Access to treatment:** Very limited access to PEG-INF/RBV treatment.

**Access strategy:** Vietnam government has included PEG-IFN on the national drugs list (which allows reimbursement by state-run insurance plans), but as the national HCV treatment guidelines have not yet been released, to date nobody has been treated under this plan.

**Barriers to treatment:** Lack of awareness and price of medicines. PEG-IFN costs about US \$150/dose, or US \$7,200 for a full course of treatment. There is a potential 66% reduction through a “buy one get two free” deal, but even US \$2,400 would still be too expensive for either patients or government.

**Facilitators:** Vietnamese and foreign NGOs have made large efforts to secure government commitments to provide prevention, testing, and treatment for HCV. Inclusion of PEG-IFN on the national medicines list is an example of their advocacy impact.

## MEETING PART TWO: COMMUNITY-INDUSTRY DIALOGUE

### Who Had a Plan, Who Didn't?

Prior to the meetings, each company was asked to provide a detailed overview of their clinical and access programs, including plans to license and register DAAs in LMICs, and prices for diagnostics and drugs in specific countries (see Appendix D: Questions to Companies).

During the meetings, companies insisted that eligibility for discounted prices and HCV treatment access programs would be linked to treatment needs in each country. Yet, a number of MICs with high HCV prevalence and urgent unmet treatment needs were not included in company plans. **Only Gilead, Roche, and Merck presented any specific information on an access plan for their drugs.**

#### Company Proposed Access Policies

Company	Countries included	Access policy
AbbVie	No details provided	Will be based on "unmet patient need"; possible named-patient access for compassionate use.
BMS	No details provided	Still in preliminary discussions, may be ready by end 2014. Considering voluntary licensing. Tiered pricing based on GNI/capita and "affordability."
Gilead	60 LICs	Sofosbuvir US \$350/month price in Egypt presented (not final). Voluntary licensing in India with US \$2,000/course price cap. The VL that Gilead grants to generic drug makers will prevent them from producing sofosbuvir on their own even if it is ultimately not patented in India, which will limit access worldwide. Tiered pricing based on GNI/capita, considering disease burden and other factors.
Janssen	No details provided	Tiered pricing is "equity-based" but unclear what that means. Considering voluntary licensing. No prices given even in markets where it is registering telaprevir (e.g., Tunisia, Morocco).
Merck	49 LICs for PEG-IFN; no indication for DAAs	LIC price for PEG-IFN at US \$2,000/course. Differential pricing in Egypt, Ukraine, Georgia. No prices given for boceprevir, though 2,400 people have received treatment through a global access program since 2011 (the program will end in 2014).
Roche	U.S. & developed world (ex-U.S.): Uniform pricing. Emerging Markets: Tiered pricing and dual branding; LICs: no patent enforcement.	For PEG-IFN: China: \$150/vial mix patient/govt. payment and company donation; Vietnam: "buy one, get two free," priced similar to China, but not actually running; India: dual branding. Egypt, Georgia, Morocco: negotiated prices. Claims to have lowered price on PEG-IFN in many cases recently, but thin on details. Has patient assistance programs, negotiate on a case-by case basis.

Companies failed to provide in advance or during the meetings:

- Specific numbers of people who had accessed treatment under existing access programs;
- Prices in different LMICs;
- Registration plans for the new generation of DAAs; or
- Methodology used to determine tiered pricing.

Gilead's plan excluded some of the countries with the highest HCV disease burden: Georgia, China, Ukraine, Russia, and Thailand. Its plan included licensed generic production, but limits competition among generic producers. This will prevent access to truly affordable generics for many years.

The access plans presented by companies were not acceptable. VEs and "access pricing" allows companies to keep their grip on potentially profitable markets, particularly China, India, Brazil, Indonesia, South Africa, South Korea, Turkey, and Mexico. These strategies will largely prevent production of, and access to generics—and minimize or delay price reductions from originators. Without access to affordable HCV medications—especially in MICs—millions will die.

***It is really shocking that you do not have a projection or plan, even when you show a lot of efforts in developing your product. Are you aware of how many people in the world are waiting for this treatment? That they desperately, desperately need it? That could die in the coming months? So how could you just say that you don't have a projection, or any access plan...I am very shocked.*** —Lorena Di Giano, Argentina

***The prevalence in China is the same as the U.S. but it has four times the population. If you take into account that those who are most affected by the disease are those who will not be able to afford any co-payment, please consider that. Also, China as a whole...as a high, or emerging rich country is just a false image of the country and how people actually live.***  
—Dr. Lisa Peiching Huang, Vietnam

***There are countries in the Indian Ocean, for example, which have free health care systems and still the government cannot afford the treatment. Take the country where I'm from, Mauritius, where the government offers free testing but cannot afford treatment. You can know your HCV status, but no genotyping, no viral load, the reason being that they cannot promise anything afterwards, they cannot afford to provide treatment. The drugs are simply too expensive.*** —Nudhar Bundhoo, Mauritius

***For the higher income countries [the price of treatment] shouldn't be so high. You say that transplants are very expensive, but can you count the amount of countries that they are paying for the transplant for the patient? Normally the patient just dies.*** —Dr. Kieu Thi Mai Huong, Vietnam

## Company Rationale for Pricing and Access Strategies

### What Is the Production Cost?

*You can talk about what is the lowest cost it's going to be possibly produced at. That's not what we're talking about here. We're trying to find a price that's going to make it available in these markets.* —Gregg Alton, Gilead

*What I am hearing is that you just care about profits. You are telling us, the communities that need treatment, to go and create demand...for what? For your pockets?*  
—Lorena Di Giano, Argentina

Pharmaceutical companies consider various factors when setting a market price for their product. They do not disclose all of the factors influencing their calculations. Historically, AIDS activists have challenged the companies to be more transparent and disclose how they formulate their pricing decisions. They have consistently refused to do so.

During the HCV World CAB, both activists and companies referred to work from Andrew Hill and colleagues comparing the production cost of HCV DAAs to those of similar HIV drugs. They found that actual production costs of the new DAAs—if ramped up to millions—would be no more than a few hundred U.S. dollars per treatment course.

**Estimated Minimum Production Costs, 12 Weeks of HCV DAAs**

Agent	Daily dose	Dose for 12 weeks	Production cost estimate (\$/g)	Predicted cost
Ribavirin	1000–1200 mg	84–100g	\$0.25–0.75	\$21–63 (1000mg) \$25–76 (1200mg)
Daclatasvir	60 mg	5g	\$2–6	\$10–30
Faldaprevir	120 mg	10g	\$10–21	\$100–210
Simeprevir	150 mg	13g	\$10–21	\$130–270
Sofosbuvir	400 mg	34g	\$2–4	\$68–136

Source: Hill A, Khoo S, Fortunak J, et al. Minimum costs for producing hepatitis C direct-acting antivirals for use in large-scale treatment access programs in developing countries. *Clin Infect Dis.* 2014 Apr;58(7):928-36.

**Dr. Mai:** I just want to give you some information on the pricing that's affordable by patients in Vietnam. Let's say your LIC price is US \$350/month: that's more than US \$1,000 [for a full course of treatment]. We are NGOs working with PWID, sex workers, and PLWHA: people who don't even have the money to buy needles, so they have to share needles, that's how they got HCV. If you put the price at US \$1,000, it's very expensive for them. Even if the government is paying for the health insurance, I think the price shouldn't be more than US \$200 for the whole treatment.

**Gilead:** The first thing I'll say is, we can't even make the product for US \$200 for a course of therapy, regardless of what others may say. But we'll work with Vietnam to hopefully come up with a price that's reasonable. We do understand that a lot of patients do pay out of pocket, and unfortunately even what I know our cost of goods are is probably too expensive for most patients in these markets, even for cost of goods.

**Dr. Mai:** So if it's not US \$200, how much it can go down?

**Gilead:** You'll have to wait and see.

Participants also pressed Roche and Merck on their pricing for PEG-IFN, as it is the only treatment available in many LMICs, and high prices remain a major barrier to lifesaving treatment.

**Chloé Forette, France:** We know that [PEG-IFN] is very cheap to produce, perhaps \$5 per vial, so it should be possible to sell for something around \$250 for a 48-week course.

**René Maier, Roche:** With regards the estimation of a fair price, if you look at the estimation for production costs, this might not be considered a fair price from our perspective. We would obviously also need to have some additional costs.

**CF:** So what is the “fair price”?

**RM:** That is a philosophical question, what is a fair price. We can disclose from our side, what a fair price is.

**CF:** How much does it cost to produce?

**RM:** I don't know, I don't know, because we produce thousands of variations of Pegasys and every cost is different, there is not one uniform cost...it depends on the size, it depends on many things...it's not that easy.

## Tiered Pricing

***Every company is coming up with your own interpretation of who fits where. Sometimes it's based on the GNI, sometimes it's based on the disease burden. But when you want to exclude somebody, you don't consider the reality in the country. Why is China always excluded? That's where the highest disease burden is, so why is it excluded?*** —Giten Kwairakpham, Thailand

Only one company—Gilead—offered pricing details (initially, \$350/month for sofosbuvir in Egypt, which was later negotiated to \$300/month for the government, although prices for people who must pay out of pocket remained much higher). Nearly all the other companies insisted that no price had been settled in high-, middle-, or low-income countries and that they were still trying to establish the outline of their pricing policy in developing countries.

Janssen, Gilead, and Merck said DAA pricing in MICs and LICs would be “tiered” or “differential,” and that both GNI and epidemic burden would be somehow included in part of the calculation, but none was willing to discuss the exact criteria or formula.

Activists in the past have criticized the arbitrary, inappropriate, and non-transparent tiered pricing criteria—and that pharmaceutical companies can exclude specific countries, or revoke the set price at will.

***We are committed to differential pricing...for middle-income countries, it's differential pricing, and we are committed to work with governments, NGOs, and funding organizations to develop the best price for the country.*** —Isabelle Girault, Merck

***In MICs, we will differentiate price based on a number of factors including the government's willingness to expand or to create a treatment program for hepatitis C.*** —Paul Schaper, Merck

***Generally speaking, the company definitely does look at affordability...things like GNI per capita as it determines what part of the world might qualify for different programs.***

—Sunil Patel, BMS



***We're looking at the infected population. We're looking at GNI per capita. And then we'll develop three tiered categories. You'll have a low-income, lower-middle income, and middle-income. Those three categories will have a pricing per cure associated with each of these categories.*** —Gregg Alton, Gilead

***In emerging markets, we try to improve access. There is tiered pricing, dual brands (flexible prices) where there is no public funding (i.e., out of pocket), lowering prices...In the poorest part of the world, the least developed and low-income countries, ... we do not enforce patents in the poorest countries and we are willing to accept generic companies supplying to the market there as needed.*** —René Maier, Roche

Dirk Van Eeden from AbbVie was the only pharmaceutical representative to refer to the flaws of tiered pricing, although he did not suggest a solution:

***First with regards to preferential pricing, everybody had a preferential tiered pricing system. Quite frankly, I don't think it worked. Countries are too different, you can look at two countries right next to each other, one's GDP is just below or above, and how do you distinguish between the two?***

## Licensing

A number of companies proposed or said they are considering issuing voluntary licenses in LMICs. Although companies took credit for supporting access to generic ARVs, their VLs actually created serious access barriers. VLs limit production volume and distribution of generics; by charging royalties, companies ensure that profit margins will be too low to attract many generics producers. These VLs exclude many high-burden MICs, since companies see them as emerging markets.

As an example, Gilead's proposed VL for sofosbuvir limits access to only a fraction of all the people who need it—and allows Gilead to block generic drug production and collect royalties, even in countries where sofosbuvir is not patented.

## Registration

***Our line: We need to register in those countries where we can make a lot of money first.***  
—Dirk Van Eeden, AbbVie

***We are not very happy when we see companies trying to delay the registration process while they try to figure out the patent status.*** —Shiba Phurailatpam, Thailand

Participants stressed that without firm commitments to register in LMICs, access would be delayed by several years, but they were not given specific timelines for DAA registration. Most companies said that it was too early to commit to registration schedules, especially as most of the new drugs were not yet approved in the U.S. or Europe.

Gilead said it was opening offices in countries including Russia, Brazil, and India, with the aim of registering and marketing HCV treatment at prices that would allow rapid treatment scale-up; BMS said discussions were ongoing about registration of its DAA daclatasvir in Mexico, Brazil, and Argentina, as well as clinical trials (required for registration) in China.

## Commitments to Access?

Each pharmaceutical company declared its commitment to the fundamental principle that medicine should be accessible to all who need it. Many company representatives cited their experience with HIV, saying lessons they learned would translate into faster access to more affordable HCV treatment.

***Our goal is to reach as many patients with hep C as quickly as possible.*** —Gregg Alton, Gilead

***I can tell you what the general principle will be, that we will have underpinning all of our decisions, and that will be unmet patient need...we didn't develop this product to stay in the laboratory in the United States.*** —Dirk Van Eeden, AbbVie

***Our aim is for everyone who needs our products to be able to access them...In general, we do have a philosophy that our primary contribution is to develop and invent medicine that can improve patients' lives, and our aim and mission is for patients to be able to access those medicines.*** —Yvette Venable, Roche

***Really what we're trying to do in terms of HCV is to work towards eradication.***  
—Karin Cerri, Janssen

***We are also committed to work with you and other stakeholders to make [HCV] drugs available and affordable as quickly as possible.*** —Isabelle Girault, Merck

***One of our core principles is access to our medicines for patients.*** —Gary Rose, BMS

But instead of presenting their plans to increase and speed up access, companies raised obstacles familiar to AIDS activists from similar discussions over the last 20 years. These included:

- Insisting that governments needed to “show commitment” to either expanding existing treatment programs or providing universal access before affordable pricing could be offered;
- Insisting that a “global funding mechanism” similar to the Global Fund or PEPFAR would be needed before HCV treatment would be accessible to those in LMICs;
- Offering discounted but still unaffordable prices to “access countries” composed of the world’s poorest countries, many of which have neither an HCV treatment program nor the ability to fund such a program;
- Insisting that barriers other than high prices, such as poor medical training or infrastructure, needed to be addressed, instead of discussing actual prices;
- Excluding the countries with the highest HCV disease burden from “access” pricing plans;
- Basing access programs and pricing on countries’ GNI rather than a realistic assessment of people and government’s ability to pay for treatment (see Appendix E).

## Who Is Responsible, Who Will Pay?

Throughout the meetings, each company said its commitment to access was contingent upon governments to provide leadership and resources, or external funding mechanisms to pay for treatment. Yet, there is no indication that a designated HCV global fund is in the works.

*We need to see a budget for hep C...we need to start to convince governments that there's an investment that needs to be made in hepatitis C, it has been made in HIV and it has worked. If we see that same investment in hepatitis C that's when we could really move the needle... Even at the lowest drug price possible, a lot of these patients aren't going to be able to afford it, so you're going to have to have money. —Gregg Alton, Gilead*

*In many middle-income countries, whether we like it or not, people pay out of pocket. The only way we will increase access is to make an affordable price for them. Counting on the government and the third party payers in that middle-income country market, which is the biggest one, is not going to increase access. —Els Torreele, United States*

*Until there was a PEPFAR and until there was a Global Fund and until there was a Gates foundation Initiative there really was terrible access to HIV drugs, no matter what programs were in place...I think it's going to be really hard to provide the kind of access to these kind of drugs that we need to provide without that kind of program. —Gary Rose, BMS*

*You talked about the Global Fund...there simply will not be a global fund for HCV...nor will the high price be supported in the developing world. When you set your prices, you need to ask the community, ask governments what will really allow access. Please don't set your price at US \$80,000 or \$40,000 or \$20,000 and then wait for the global funding mechanism to appear, because that's not going to happen. —Giten Kwairakpham, Thailand*

*We have to work at this together...unless there is a sustained investment in treatment for hepatitis C, we're not going to see the sort of access that I think we all want to see...I think as governments and donors start ramping up their funding for treatment, we will certainly be able to take further steps to enhance affordability. —Paul Schaper, Merck*

*I think it's just a kind of diversion, this issue of political will. We know that political will comes when treatment is affordable...In our middle-income countries, it's not only government that pays for medicine. We think that other people, medical insurance and other systems can pay for the drug if treatment is affordable. —Othman Mellouk, Morocco*

## Role of Activists

The activists emphasized the importance of community advocacy and activism in facilitating access to treatment. They work closely with civil society and their governments, and urged companies to do their part.

*So many people in the room have been working on trying to garner political commitment from their governments to increase access to hepatitis C treatment. There have been a lot of successes in the last few years in places like Georgia and Ukraine and Thailand, but ultimately price is THE most critical barrier that needs to be overcome.*

—Azzi Momenghalibaf, United States

*We [civil society and communities] need to talk to governments, and we do that now...we pushed our governments to design HCV programs in Russia, Ukraine, Moldova, Georgia and other countries. It is your turn to cooperate with our governments. We have a strategy, we have a regional plan; [now] you should go to our governments and offer them reduced prices for the state-run programs. You should not enforce your patent in our region. You should do clinical trials to ensure access for those with special needs; and, of course, you should set prices in such a way that people with an average income can afford it. It's that simple.* —Ludmila Maistat, Ukraine

*It's not because our government suddenly decided to put money in and buy hep C drugs. It's not because of WHO, WHO did nothing to push countries to do that. And if today we have access for drugs that are sold in Vietnam, in Thailand, in my country, Morocco etc., either by people or by the government, it is because of us.* —Othman Mellouk, Morocco

*Taking the lessons from HIV, civil society was extraordinarily successful in mobilizing political support and access to generics through pressure...I think everyone here understands, as you do, what makes things happen. And we're trying not to go through the same charade as with HIV, as we know all the limitations of poor licenses and differential pricing.* —Karyn Kaplan, United States

*[to Merck] "You were saying US \$2,000 is your "rock-bottom" price, but...look at Indonesia. They have nine million people with HCV, they would need US \$18 billion dollars at your US \$2,000 price, there's no way they can find 18 billion dollars to provide universal access. Even if we could find the political will, the price itself is telling governments, "Don't even go there, just ignore the problem", and you know that.* —Khalil Elouardighi, France

## **What About the Middle-Income Countries?**

Few MIC governments offer universal health care programs, leaving most people to pay for health care out of pocket. Participants challenged the criteria companies use to determine thresholds for tiered pricing and voluntary licensing.

*Are you only thinking about low-resource settings? What about MICs where the epidemics are more generalized? I am coming from Argentina, where there are 800,000 people infected. That's a lot of people.* —Lorena Di Giano, Argentina

*We all know that 75% at least of the people living with HCV are in the MICs. Why don't you focus on those countries where the epidemic is most prevalent? Many MICs have a health infrastructure and people who can treat [HCV]. Why not focus on where the need is greatest?* —Els Torreele, United States

*Looking back to some of the countries in Asia, even if we are considered middle-income countries, actually the gap between the rich and the poor is really high, and the number of people who are poor is much higher.* —Sam Nugraha, Indonesia

*We know that in middle-income countries, a lot of people pay for medicines out of pocket. We just don't understand the fact that, if what you really want is access, the price in the private sector must be affordable. If you just rely on the government, we are never going to have access to treatment in middle-income countries.* —Othman Mellouk, Morocco

## CONCLUSION

The 1<sup>st</sup> HCV World CAB did not lead to a clear understanding of pharmaceutical company initiatives for improving access to lifesaving HCV treatments in LMICs. Companies lacked a high-volume/low-profit vision that could move the world toward global eradication of the HCV pandemic, and provided little tangible information about pricing, registration, and licensing plans.

In spite of these disappointments, the meeting strengthened a burgeoning global community-led movement of people living with HCV, people who inject drugs, people living with HIV/AIDS, and their allies. Activists will continue to hold the drug companies accountable to their role as a key stakeholder in universal treatment access and scale-up.

The peer-to-peer educational and advocacy workshops deepened participants' technical understanding and sharpened national and global-level advocacy strategies. Additionally:

- The HCV World CAB was an important first step for community members to engage with pharmaceutical companies on access to HCV treatment, particularly new-generation DAAs, in LMICs.
- There was consensus that prices for DAAs in LMICs must be set at levels that governments and individuals can afford, and that access to quality generics must be promoted.
- There was solidarity around key principles of universal access, human rights, equitable access for key affected populations—in particular people who inject drugs—and the critical role of advocacy to achieve policy goals at national and international levels.
- There was strong agreement that countries have the responsibility to protect public health and promote individuals' right to health care, and must be empowered to use all means necessary to do so (including through TRIPS flexibilities, and rejection or revocation of patents).

***You need to start proving that you do care about people...you have a commercial interest, this we can understand...start with the rich countries...but in Africa and Asia and Eastern Europe, these pricing strategies are not going to work...we have a huge network, we can mobilize 100,000 people to get treated if the price is affordable, but right now, at this price, it is not going to work. —Shiba Phurailatpam, APN+, Thailand***

## **Closing Thoughts from HCV World CAB Members**

*Thousands of people in Ukraine wait for the lifesaving HCV treatment that the government of Ukraine and most of the EECA regions cannot afford due to extremely high prices. It is important that we stand together in combating the unacceptable policies of pharmaceutical companies aimed at hindering access to new hepatitis C treatment. The WCAB, which brought together leading HCV activists from different parts of the world, is an important step in this battle for access to treatment.* —Ludmila Maistat, the HIV/AIDS Alliance–Ukraine

*There are important lessons to be learned from HIV treatment activism. The 1st World CAB on hep C for me was an important meeting, as it facilitated peer learning and sharing of those lessons learned across the regions. It also helped our communities in an effort to mobilize for tremendous scale-up of better, more effective treatment for hepatitis C in low- and middle-income countries.* —Ed Ngoksin, Global Network of People Living with HIV (GNP+), South Africa

*Russia is now facing a fast-growing hepatitis C epidemic, and the access to treatment is far from universal, to say the least. The current standard of care is available to a very limited number of patients, and the new meds are priced very high, as Russia is a high-income country. This CAB has been a great opportunity to discuss strategies to improve access among activists from all around the world; I hope the ideas I have accumulated here will be useful in our fight for the national Hep C treatment program.* —Sergey Golovin, ITPC-ru, Russia

*It was very useful for me to sit and plan together with activists from around the world. Learning the latest global developments in HCV drug research and brainstorming on the challenge of access to these new drugs will hopefully allow us to secure treatment for millions of people in China.* —Thomas Cai, AIDS Care China

*WCAB was the stepping stone for direct negotiations of price reduction of HCV treatments with pharmaceutical laboratories; an opportunity that many small islands in the Indian Ocean do not get very often. Building such a strong alliance with the HCV World CAB partners meant more support from more people who are in the same fight; fighting for right to health, the right to life.* —Nudhar Bundhoo, PILS (Prévention Information et Lutte contre le SIDA), Mauritius

*The World CAB Meeting on hepatitis was heralded as a revolutionary moment in the injecting drug-using community fight for acknowledgement as a partner in the response to this epidemic...being asked to work with other committed, experienced activists to look at this epidemic with honesty and clarity gave us great hope. The meeting itself provided us with both global and quite specific information that is invaluable to our global and regional advocacy work. Just as importantly, I think, has been the ongoing dialogue between the members of the community, as we strive to ensure all members have the most up-to-date and relevant information. A monumental success on all levels!* —Jude Byrne, INPUD, Australia

## APPENDIX A. PARTICIPANT LIST

### Africa

Abshiro Halake, Kenya Red Cross Society  
Ed Ngoksin, GNP+, South Africa

### East and Southeast Asia

Zhang Bo, Yunnan IDA, China  
Thomas Cai, AIDS Care China  
Odilon Couzin, Hong Kong  
Kajal Bhardwaj, India  
Edo Agustian, PKNI, Indonesia  
Aditya Wardhana, IAC, Indonesia  
Do Dang Dong, VNP+, Vietnam  
Dr. Lisa Peiching Huang, MdM, Vietnam  
Dr. Kieu Thi Mai Huong, SCDI, Vietnam  
Paul Cawthorne, MSF, Thailand  
Dr. Gonzague Jourdain, Thailand  
Giten Khwairakpam, Thailand  
Shiba Phurailatpam, Thailand  
Jirasak Sripramong, TTAG, Thailand

### Eastern Europe/Central Asia

Paata Sabelashvili, Georgian Harm Reduction  
Network, Georgia  
Sergey Golovin, ITPC-Russia  
Ludmila Maistat, HIV/AIDS Alliance-Ukraine

### Islands

Nudhar Bundhoo, Prévention Information et  
Lutte contre le Sida (PILS), Mauritius

### Latin America

Lorena Di Giano, RedLAM, Argentina

### Middle East/North Africa

Heba Wanis, Egyptian Initiative for Personal  
Rights  
Othman Mellouk, ITPC-MENA, Morocco  
Dr. Mustapha Sodqi, ALCS, Morocco

### U.S. and Europe

Khalil Elouardighi, Coalition Plus, France  
Chloé Forette, MdM, France  
Pauline Londeix, Act Up-Basel/ITPC, France  
Jorrit Kabel, AIDS Fonds, The Netherlands  
Simon Collins, HIV i-Base, United Kingdom  
Jude Byrne, INPUD, United Kingdom  
Tahir Amin, I-MAK, United States  
Karyn Kaplan, TAG, United States  
Noah Metheny, Global Forum on MSM & HIV,  
United States  
Azzi Momenghalibaf, OSF, United States  
Camila Picchio, TAG, United States  
Priti Radhakrishnan, I-MAK, United States  
Tracy Swan, TAG, United States  
Els Torreele, OSF, United States



## APPENDIX B. PHARMACEUTICAL COMPANY REPRESENTATIVES

### AbbVie

Kazuo Aota, Medical Director, HCV [Japan, Asia-Pacific (JAPAC)]  
Dirk Van Eeden, Senior Director, Current Affairs Communication  
Jim Howley, Director, Global Patient Relations

### BMS

BL Neo, MD, Disease Strategy Lead, Virology Medical  
Sunil Patel, Director, Global & Corporate Policy, Virology  
Gary Rose, Director, Global Medical Advocacy, Virology

### Gilead

Gregg Alton, Executive Vice President, Corporate and Medical Affairs  
Nick Francis, Access, Emerging Markets and Health Policy, Public Affairs  
Phil Pang, Director of Clinical Research (via teleconference)  
Clifford Samuel, Vice President, Access Operations and Emerging Markets

### Janssen

Karin Cerri, Senior Director – External Partnerships  
Ronan Collins, Director, Global Communications and Public Affairs  
Paul Slade, Senior Director, Infectious Diseases & Vaccines Regional Medical Affairs Asia-Pacific

### Merck

Fernando Alvarez Bognar, MD - Regional Director Medical Affairs, Asia Pacific (Hepatitis)  
Isabelle Girault – Executive Director, Access & Strategy, HIV & Hepatitis, Emerging Markets  
Paul E. Schaper, Executive Director, Global Public Policy  
Kittima Sriwatanakul - External Affairs Director

### Roche

Rene Maier, Senior In-Market Pricing Leader, Latam, APAC, CEMAI  
Harald Sprenger, Market Access Leader, APAC  
Yvette Venable, Global Head of Public Policy

## APPENDIX C. MEETING AGENDA

### Saturday, Feb. 22 (Day 1)

8:45–9:45	Welcome (K. Kaplan, TAG and S. Phurailatpam, APN+)
9:45–11:15	Basic DAA Literacy Training (T. Swan, TAG)
11:15–11:30	Coffee Break
11:30–12:30	Introduction to Biosimilars (A. Momen, OSF)
12:30–1:30	Lunch
1:30–3:00	Strategizing for HCV Treatment Access: Key Intellectual Property (IP) Issues (P. Londeix, Act Up-Basel; K. Bhardwaj - India)
3:00–3:15	Coffee Break
3:15–5:00	Advocacy discussion
5:00–5:30	Wrap-up

### Sunday, Feb. 23 (Day 2)

9:00–10:30	Key populations People who inject drugs (J. Byrne, INPUD) Men who have sex with men (N. Metheny, MSM-GF)
10:30–11:30	HCV DAA patent update and strategies for access (T. Amin, I-MAK, via teleconference)
11:30–11:45	Coffee Break
11:45–1:00	Pharmaceutical company approaches to HCV treatment access (P. Cawthorne, MSF; S. Collins, HIV i-base)
1:00–2:00	Lunch
2:00–3:00	Experiences of Asia and EECA CAB Pharma Negotiations (S. Phurailatpam, S. Golovin, ITPC-Ru)
3:00–4:30	Drug company meeting logistics (T. Swan, S. Collins)
4:30–4:45	Coffee Break
4:45–6:00	Drug company meeting logistics (continued)
6:00–6:30	Q&A, wrap-up (Facilitator: K. Kaplan)

### **Monday, February 24 (Day 3)**

9:00–11:00	Meeting with BMS
11:00–11:15	Coffee Break
11:15–1:15	Meeting with AbbVie
1:15–2:15	Lunch
2:15–4:15	Meeting with Janssen
4:15–4:30	Coffee Break
4:30–6:30	Meeting with Merck

### **Tuesday, February 25 (Day 4)**

9:00–11:00	Meeting with Roche
11:00–11:15	Coffee Break
11:15–12:00	Advocacy next-steps discussion
12:00–1:00	Lunch
1:00–4:00	Meeting with Gilead
4:00–5:00	Meeting with Zydus/Cadila generic company, India
5:00–6:30	Closing and wrap-up; advocacy action plan

## APPENDIX D. QUESTIONS TO COMPANIES

### General Questions (for all originator companies)

#### A. Drug development

Please provide a brief update on your approved DAAs and those in the pipeline, including the following: sofosbuvir, ledipasvir, simeprevir, MK-5172 + MK-8742, daclatasvir, faldaprevir, asuneprevir, BMS-791325, ABT-450/r, ABT-267, and ABT-333.

Which drug-drug interaction trials have been conducted, and what are the results?

Have you assessed the antiviral activity of your DAAs against genotypes 4, 5, and 6, since these are understudied [and prevalent in low-/middle-income countries (LMICs)]?

Did look at new DAAs in pre- and post-menopausal women? Are there plans to study this?

Where can information about investigator initiated studies be found on your website? How else can we gain access to it?

Do you have an ideal drug regimen combining with another company products, and plans for studying them?

Please provide information on your access programs, including criteria for compassionate use, and plans to support or launch clinical trials.

#### B. Registration

Please provide expected dates for registering new DAAs in each country (see participant list) or by region, and for what indications will you seek approval (i.e., genotypes, HIV/HCV-coinfected, etc.)

#### C. Pricing

What are your pricing plans and strategies, by region and country?

Will tiered pricing be implemented? Where and how?

Please provide updates on your price negotiations with specific LMIC ministries of health, and share plans for meeting with other governments.

For companies with approved DAAs: In the interest of transparency, will you release country-specific pricing?

Are there plans to reduce the price of HCV drugs currently on the market? If so, please describe them.

#### D. Licensing

Are you planning to issue voluntary licenses to local manufacturers in LMICs?

Which companies do you plan to work with, and where? Can you tell us the price or price range set for each drug?

Whether and how you may be planning licensing strategies with, for example, the Medicines Patent Pool (MPP) or other mechanisms?

#### E. Marketing/Sales

For companies with approved DAAs: Please provide your sales data from global markets.

What are your regional marketing plans?

## **Company-Specific Questions**

### **AbbVie**

We are aware that the FDA and EMA submissions for DAA regulatory approval are expected in Q2 2014. What about submissions in the rest of the world?

### **Gilead**

Is there any change of plans regarding potential cooperation with BMS for the phase III studies?

Please provide an update on your registration process of sofosbuvir in Indonesia.

### **Janssen**

Does the company have a phase-out strategy for telaprevir in the light of more effective and safe regimens entering the market?

Given active telaprevir marketing in some places, what are your plans for registering and providing access to simeprevir?

### **Merck**

Can you provide an update on price negotiations with the Ministry of Health (MOH) in Indonesia? In December 2013, activists were informed by the MOH during a meeting with the National AIDS Commission that negotiations were ongoing and that a price reduction on PEG-IFN in Indonesia was imminent.

Merck is the first company to have an in-house regimen including both PEG-IFN and DAAs. Does the company have any specific plans for a package price for markets that are rolling out national hepatitis C treatment programs?

### **Roche**

What information do you use to formulate pricing decisions for HCV RNA testing?

Are you planning to lower the price of viral load testing, including the cost of reagents and other components? Please describe.

Can you provide an update on price negotiations with the MOH in Indonesia? In December 2013, activists were informed by the MOH during a meeting with the National AIDS Commission that negotiations were ongoing and that a price reduction on PEG-IFN in Indonesia was imminent.

Roche states it implements a differential pricing approach, but we do not see that in reality (at least not in the EECA markets, with the exception of Georgia, perhaps, and Ukraine, to some degree). When will we see significant price reductions in countries like Moldova, Armenia, Kyrgyzstan?

### **Suggestions/requests:**

It will be excellent if you can prepare to provide global, regional, and country-level information if requested (please use participant list, attached).

It will be excellent if your slide presentation can be provided in advance, or at least have 40 hard copies of the presentation distributed to participants at the meeting.

## APPENDIX E. HCV PREVALENCE AND GNI, BY COUNTRY

Country	Number of PW HCV (millions)	HCV Prevalence	GNI per capita 2012 (USD)
China	29.8	2.2%	5,720
India	18.2	1.5%	1,550
Egypt	11.8	14%	2,980
Indonesia	9.4	3.9%	3,420
Pakistan	9.4	5.9%	1,260
Russia	5.8	4.1%	12,700
U.S.A.	5.4	1.8%	52,340
DR Congo	4.0	6.4%	230
Nigeria	3.3	2.1%	1,440
Japan	3.1	2.4%	47,870
Cameroon	2.8	13.8%	1,170
Brazil	2.6	1.4%	11,630
Uganda	2.2	6.6%	480
Philippines	1.9	2.2%	2,500
Italy	1.9	3.2%	34,640
Ukraine	1.9	4.0%	3,500
Uzbekistan	1.8	6.5%	1,720
Turkey	1.5	2.2%	10,830
Ethiopia	1.5	1.9%	380
Thailand	1.5	2.2%	5,210

Source: Hill A, Khoo S, Fortunak J, et al. Minimum costs for producing hepatitis C direct-acting antivirals for use in large-scale treatment access programs in developing countries. *Clin Infect Dis.* 2014 Apr;58(7):928-36. doi: 10.1093/cid/ciu012.